

Claims

1. Process for the preparation of modification I of torasemide, characterized in that an alkaline extract of the original reaction mixture of the last phase in the synthesis of torasemide is subjected to controlled acidifying with inorganic or organic acids.
2. Process for the preparation of modification I of torasemide according to claim 1, characterized in that the modification I of torasemide is chemically pure.
3. Process for the preparation of modification I of torasemide according to claim 1, characterized in that the modification I of torasemide contains less than 0.5 % of water.
4. Process for the preparation of modification I of torasemide according to claim 1, characterized in that the modification I contains remaining solvents within pharmacopeic limits.
5. Process for the preparation of modification I of torasemide according to claim 1, characterized in that for the preparation of the alkaline extract of the original reaction mixture of the last phase in the synthesis of torasemide water solutions of lithium, sodium and potassium hydroxide and water solutions of sodium and potassium carbonate are used.
6. Process for the preparation of modification I of torasemide according to claim 1, characterized in that for acidifying the alkaline extract of the original reaction mixture of the last phase in the synthesis of torasemide inorganic acids such as hydrochloric, sulfuric, phosphoric and nitric acids or organic acids such as formic, acetic, propionic, oxalic, tartaric, methanesulfonic or *p*-toluenesulfonic acid are used.
7. Process for the preparation of modification I of torasemide according to claim 1, characterized in that for acidifying the alkaline extract of the original reaction mixture of the last phase in the synthesis of torasemide carbon dioxide is used.

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8. Process for the preparation of modification I of torasemide according to claim 1, characterized in that the acidifying is carried out up to a pH from about 8.5 to about 5.0.
9. Process for the preparation of modification I of torasemide according to claim 8, characterized in that the acidifying is carried out up to a pH from about 7.5 to about 7.0.
10. Process for the preparation of modification I of torasemide according to claim 1, characterized in that the acidifying is carried out at a stirrer rate from 10 r/min to 300 r/min.
11. Process for the preparation of modification I of torasemide according to claim 1, characterized in that the acidifying is carried out within 5 minutes to 24 hours.
12. Process for the preparation of modification I of torasemide according to claim 11, characterized in that the acidifying is carried out continuously.
13. Process for the preparation of modification I of torasemide according to claims 11 and 12, characterized in that the acidifying is carried out without avoiding high local acid concentrations.
14. Process for the preparation of modification I of torasemide according to claim 1, characterized in that the acidifying is carried out at a temperature from 0 °C to 50 °C.
15. Process for the preparation of modification I of torasemide according to claim 14, characterized in that the acidifying is carried out at room temperature.
16. Process for the preparation of modification I of torasemide according to claim 1, characterized in that the suspension obtained after acidifying and reaching the desired pH is stirred from 10 minutes to 240 minutes.
17. Process for the preparation of modification I of torasemide according to claim 16, characterized in that the suspension obtained after acidifying and reaching the desired pH is stirred at a temperature from 0 °C to 50 °C.

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18. Process for the preparation of modification I of torasemide according to claim 17, characterized in that the suspension obtained after acidifying and reaching the desired pH is stirred at room temperature.

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